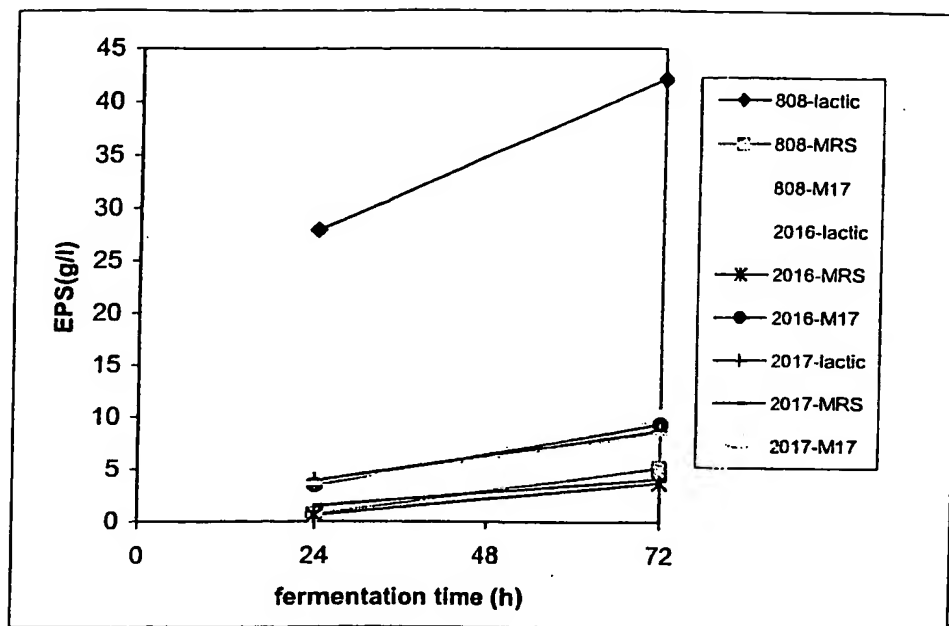
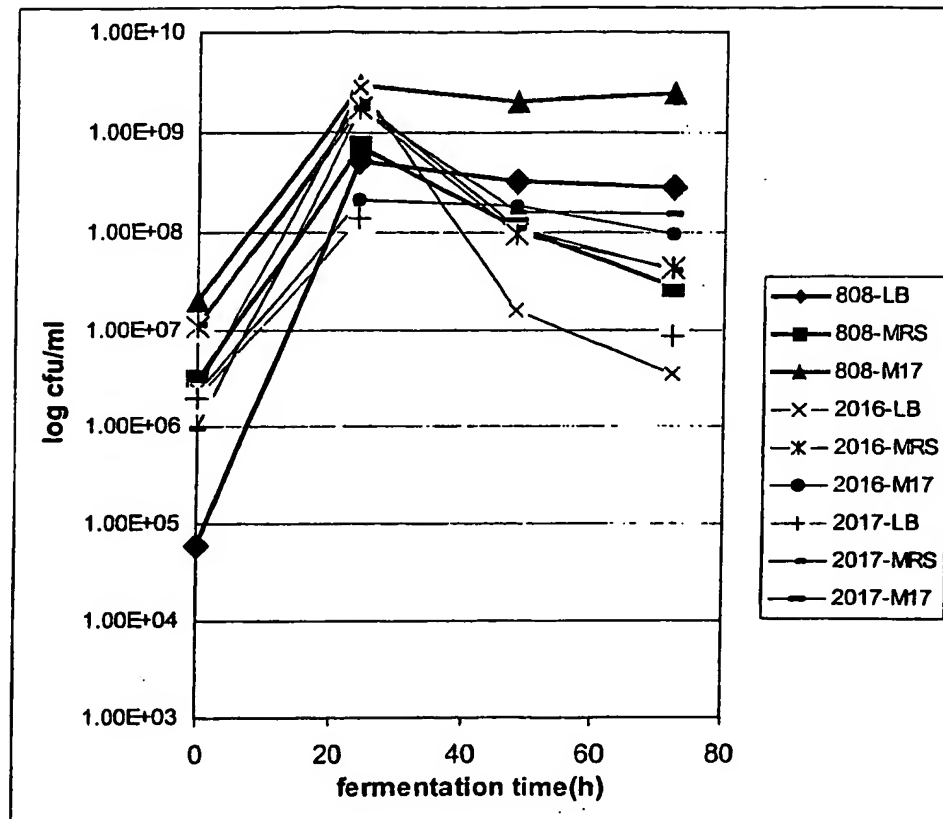


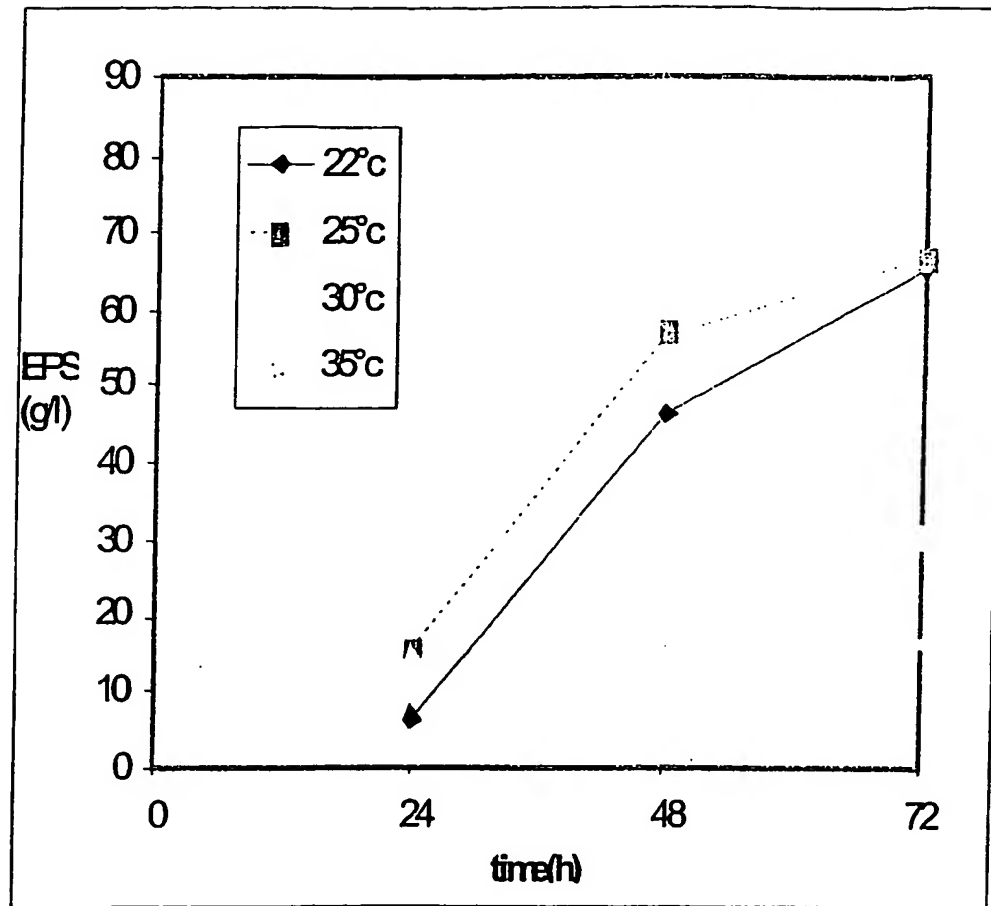
**Figure 1****Evaluation of best strain for exopolysaccharide (EPS) production.****BEST AVAILABLE COPY**

**Figure 2. Evaluation of cell count of EPS producing strains**

**Figure 3**

**Evaluation of best temperature for EPS production using *Leuconostoc mesenteroides* 808**

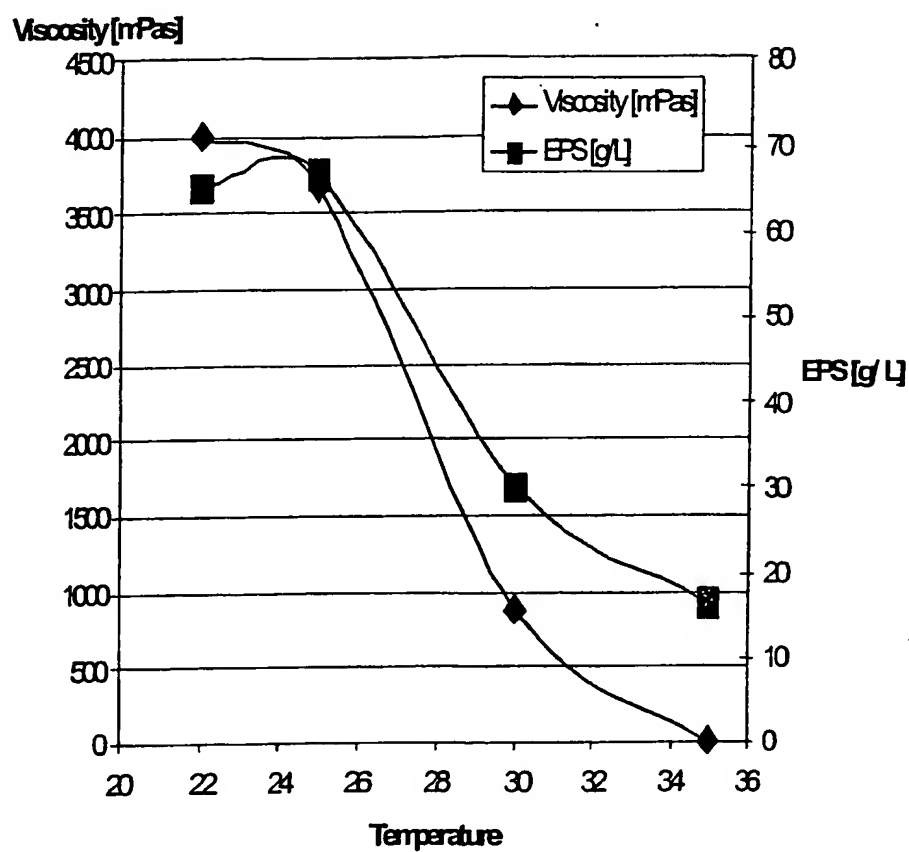
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**Figure 4**

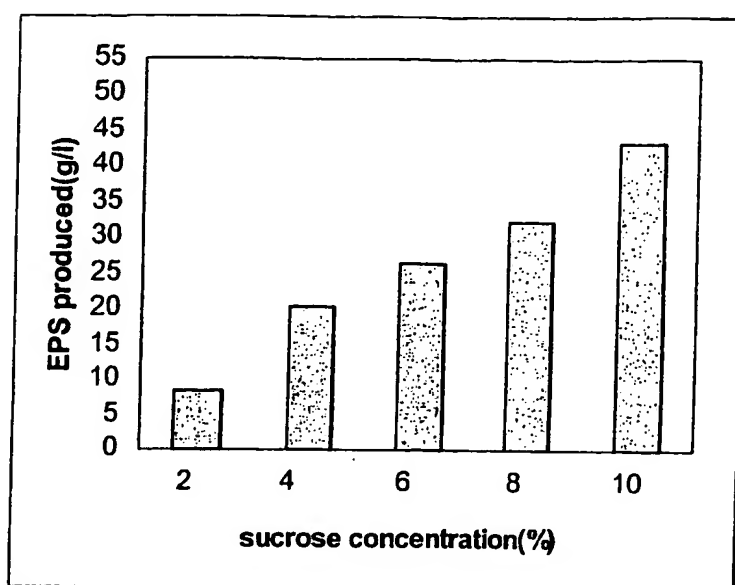
**Evaluation of EPS production and viscosity increase using *Leuconostoc mesenteroides* 808**

5



**Figure 5A**

**Evaluation of EPS production as a function of a varied sucrose concentration using *Leuconostoc mesenteroides* 808.**



**Figure 5B**

**Evaluation of EPS production and viscosity increase as a function of a varied sucrose concentration using *Leuconostoc mesenteroides* 808**

5

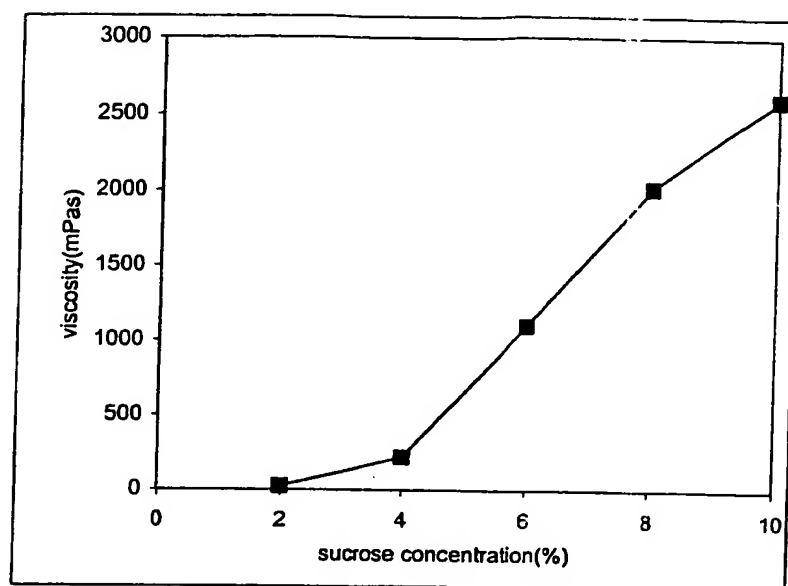


Figure 6

EPS production by *Leuconostoc mesenteroides* 121, 808, 1299B strains in growth medium supplemented with different amounts of sucrose/maltose.

5

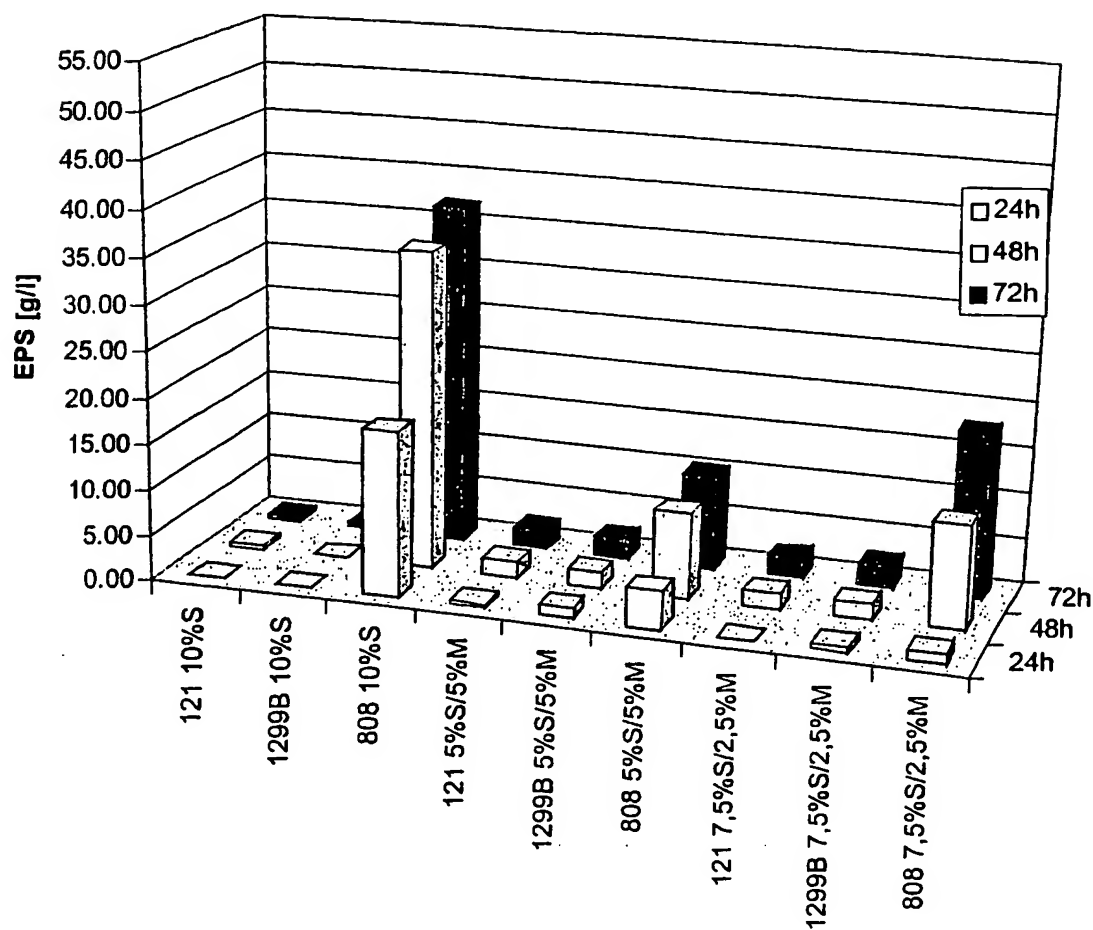


Figure 7

Changes in viscosity produced by *Leuconostoc mesenteroides* 808 strain  
5 in growth medium supplemented with different amounts of  
sucrose/maltose. Numbers 61 and 62 represent sucrose/maltose ratio 2.5% / 7.5%,  
number 63 represents 10% sucrose, numbers 64, 65, 67 and 68 represent sucrose/maltose  
ratio 5% / 5%, numbers 66 and 69 represent sucrose/maltose ratio 7.5% / 2.5%.

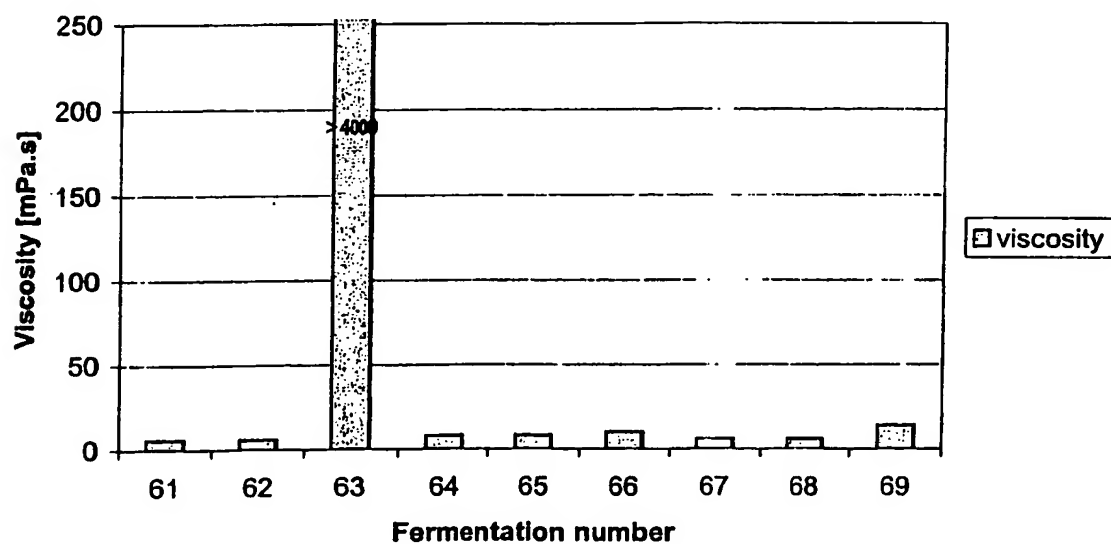
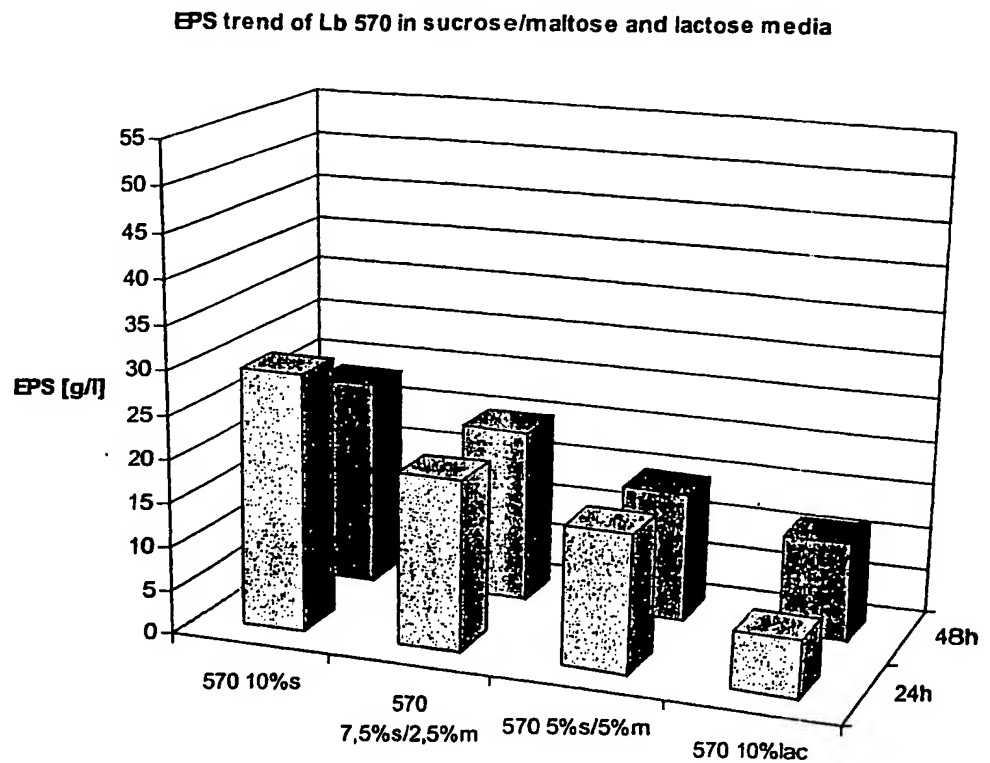


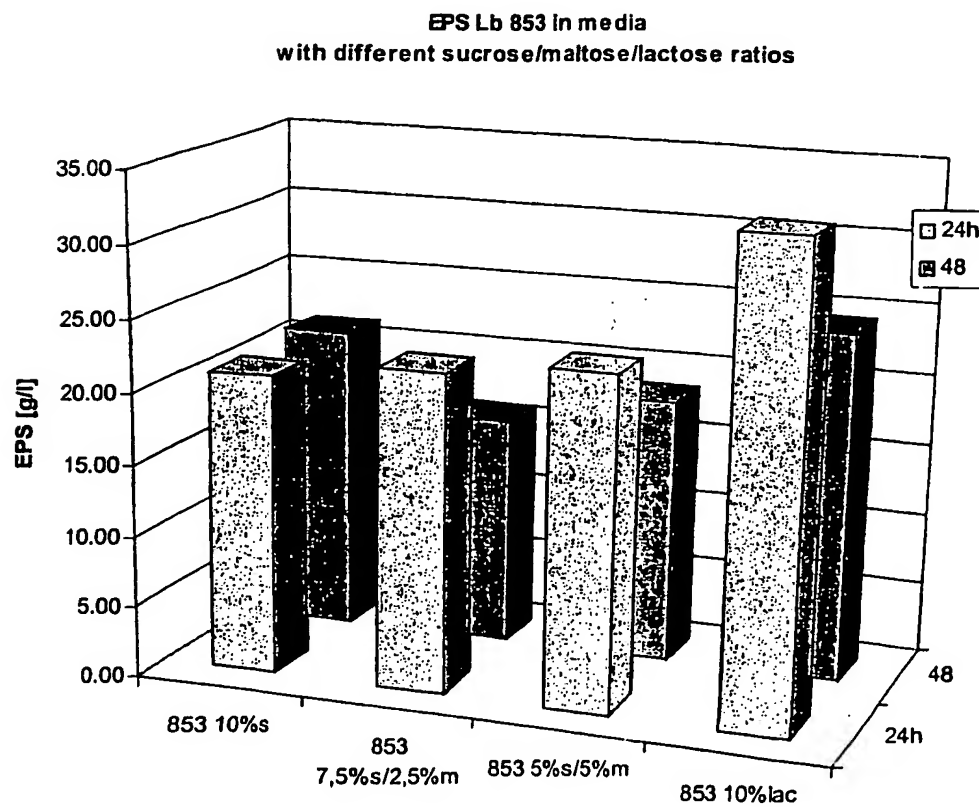
Figure 8. EPS production by *Lactobacillus sakei* 570 strain in  
5 sucrose/maltose and lactose supplemented growth medium.



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**Figure 9. EPS production by *Lactobacillus plantarum* 853 strain in sucrose/maltose and lactose supplemented growth medium.**

5



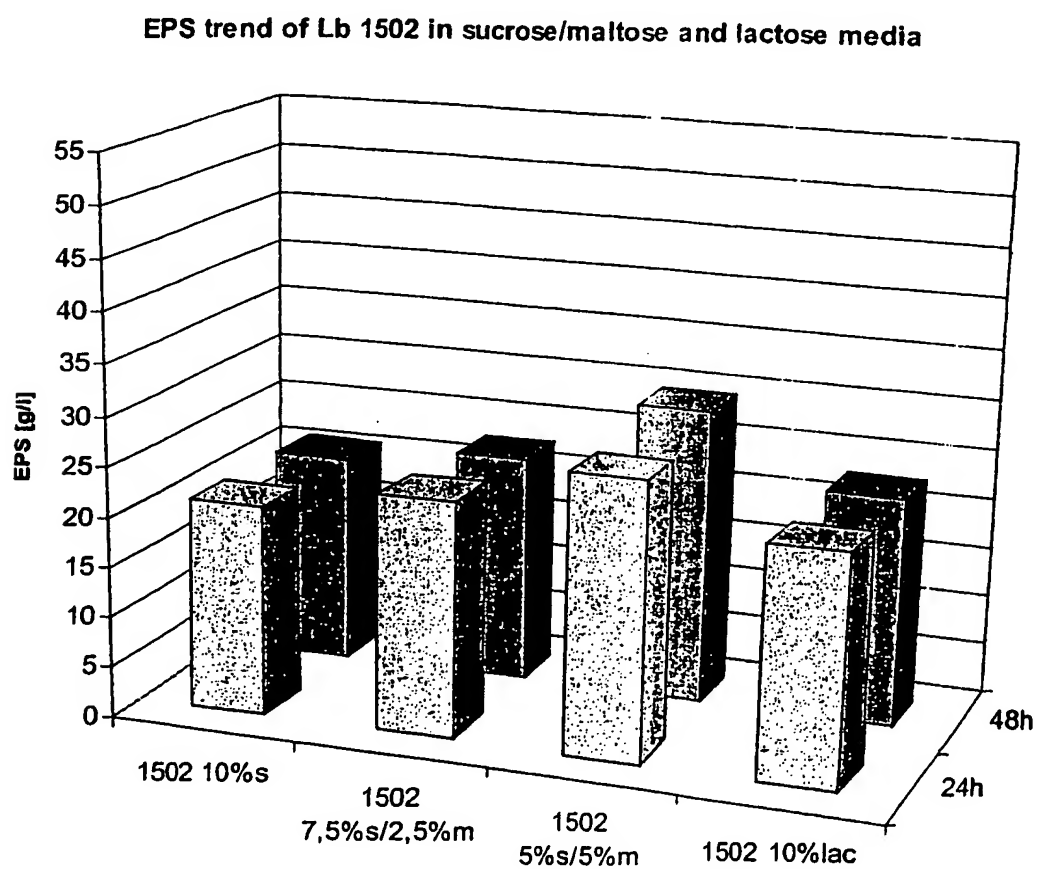
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**Figure 10. EPS production by *Lactobacillus salivarius* 1502 strain in sucrose/maltose and lactose supplemented growth medium.**

5



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Figure 11.

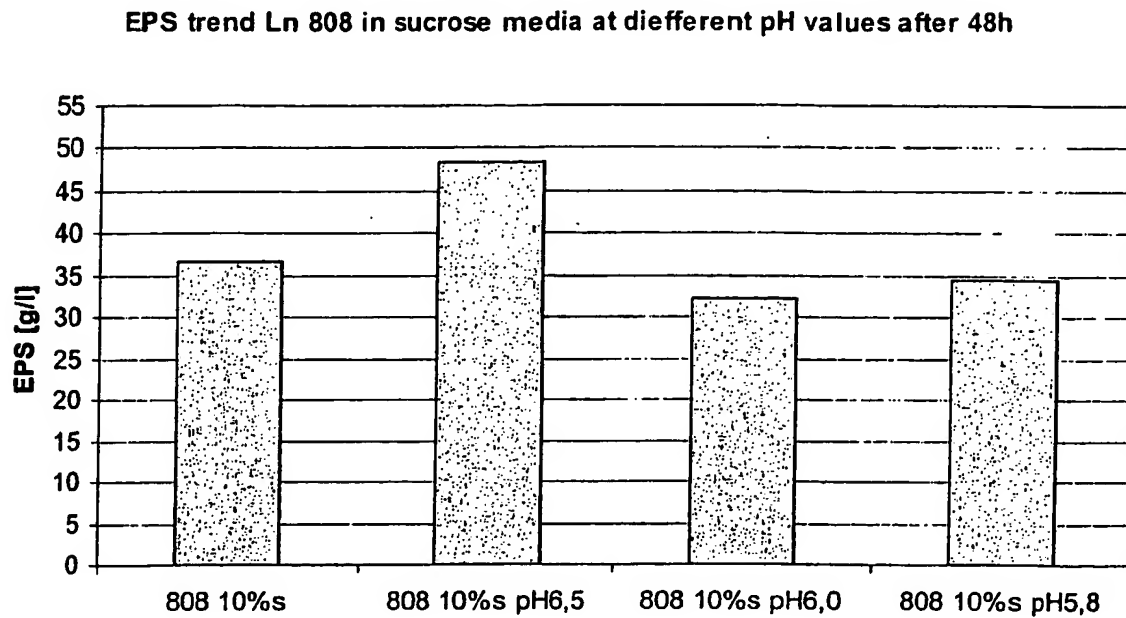
Ln 808, Lb 570, Lb 853, Lb 1502 , Effect of maltose an the EPS strain

5 length; production of oligosaccharides, EPS production from Lactose

25°C 48h (sample to DK, EPS) / 72h (pH, cfu/ml)

strain	Medium	time	Temp.	Sugar		EPS	GKZ		pH	
		[h]	[°C]	Sucrose	Maltose	[g/l]	start	finish	start	finish
808	Lactic x	48 / 72	25	100	-	50	5,00E+07	2,00E+08	6,6	4,7
	Lactic x			75	25	30	4,00E+06	6,00E+08	6,8	4,4
	Lactic x			50	50	16	5,00E+06	5,00E+08	6,8	4,4
570	MRS x	48 / 72	25	100	-	20	2,00E+06	3,00E+07	6,5	4,4
	MRS x			75	25	18	1,00E+06	8,00E+07	6,5	4,4
	MRS x			50	50	12	2,00E+06	4,00E+07	6,5	4,4
	MRS 100 Lac			-	-	11	2,00E+06	2,00E+08	6,5	5,8
853	MRS x	48	25	100	-	20	2,00E+05	8,00E+08	6,9	5,1
	MRS x			75	25	16	3,00E+05	2,00E+09	6,9	4,7
	MRS x			50	50	18	2,00E+05	3,00E+09	6,9	4,6
	MRS 100 Lac					33	1,00E+05	1,00E+09	6,8	4,6
1502	MRS x	48	25	100	-	20	2,00E+04	2,00E+08	6,9	4,4
	MRS x			75	25	24	2,00E+04	3,00E+08	6,9	4,4
	MRS x			50	50	28	2,00E+04	3,00E+08	6,8	4,4
	MRS 100Lac			-	-	20	2,00E+04	2,00E+08	6,8	4,4

**Figure 12. EPS production by *Leuconostoc mesenteroides* 808 in sucrose supplemented growth medium at different pH conditions.**

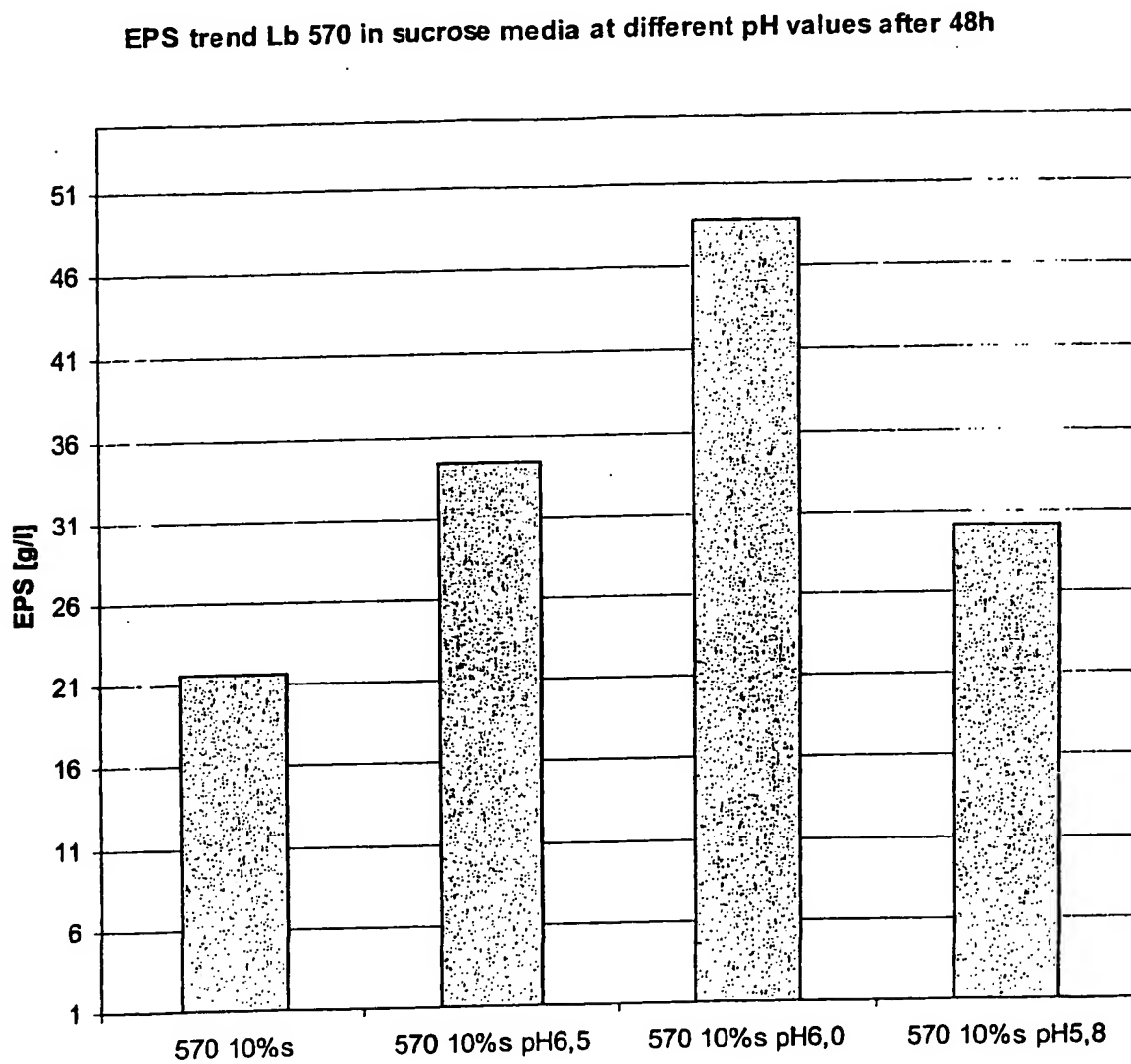


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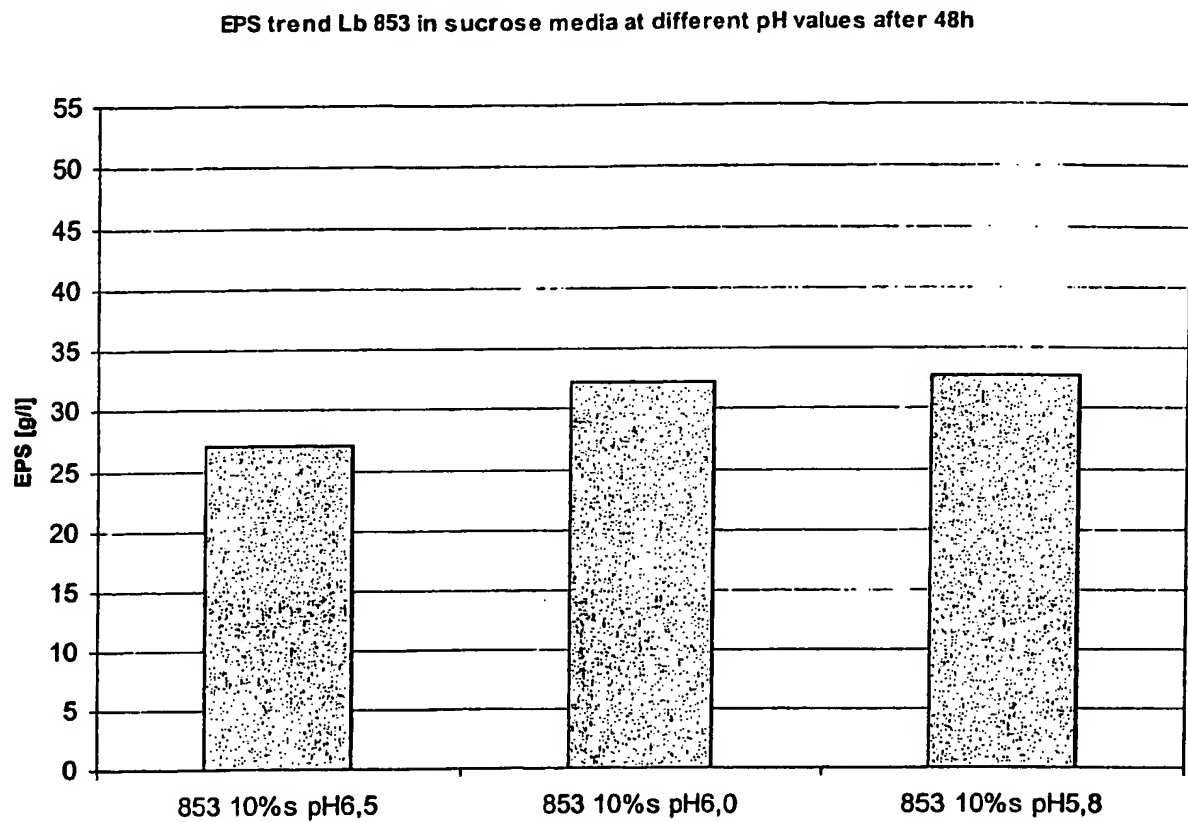
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**Figure 13. EPS production by *Lactobacillus sakei* 570 in sucrose supplemented growth medium at different pH conditions.**



**Figure 14. EPS production by *Lactobacillus plantarum* 853 in sucrose supplemented growth medium at different pH conditions**

5

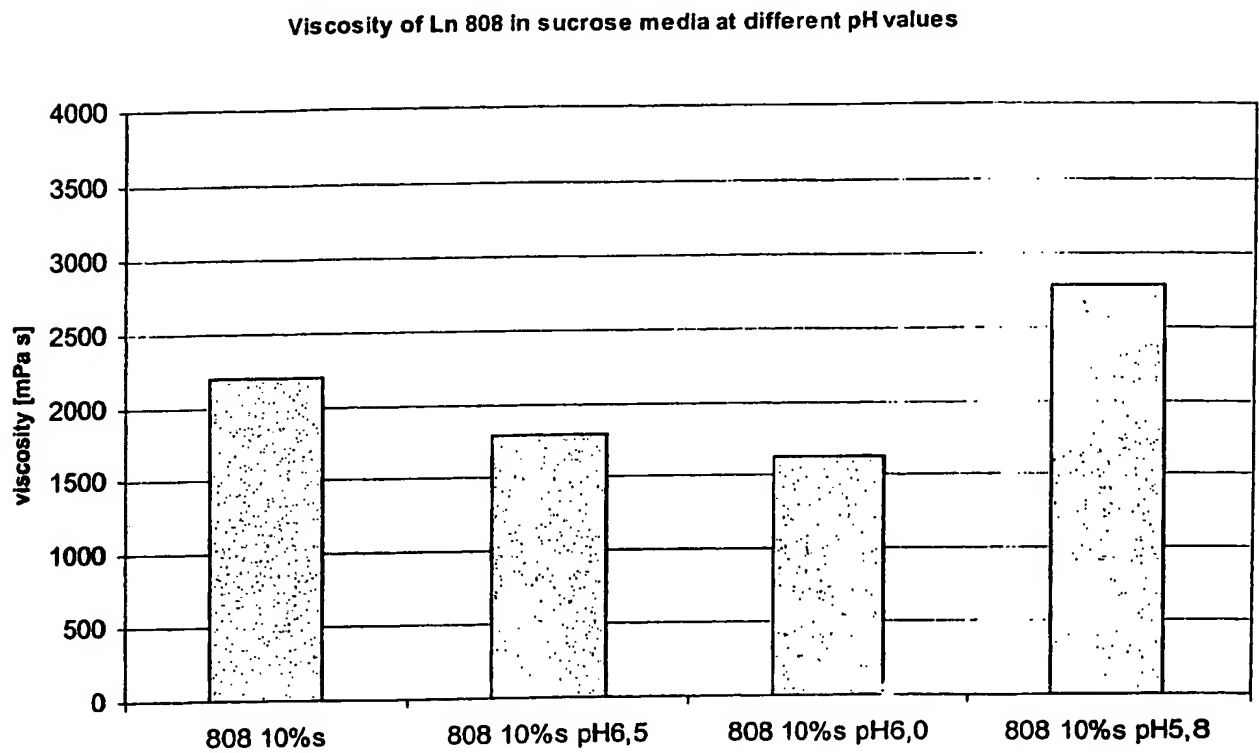


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Figure 15. Viscosity of *Leuconostoc mesenteroides* 808 in sucrose supplemented growth medium at different pH conditions.

5

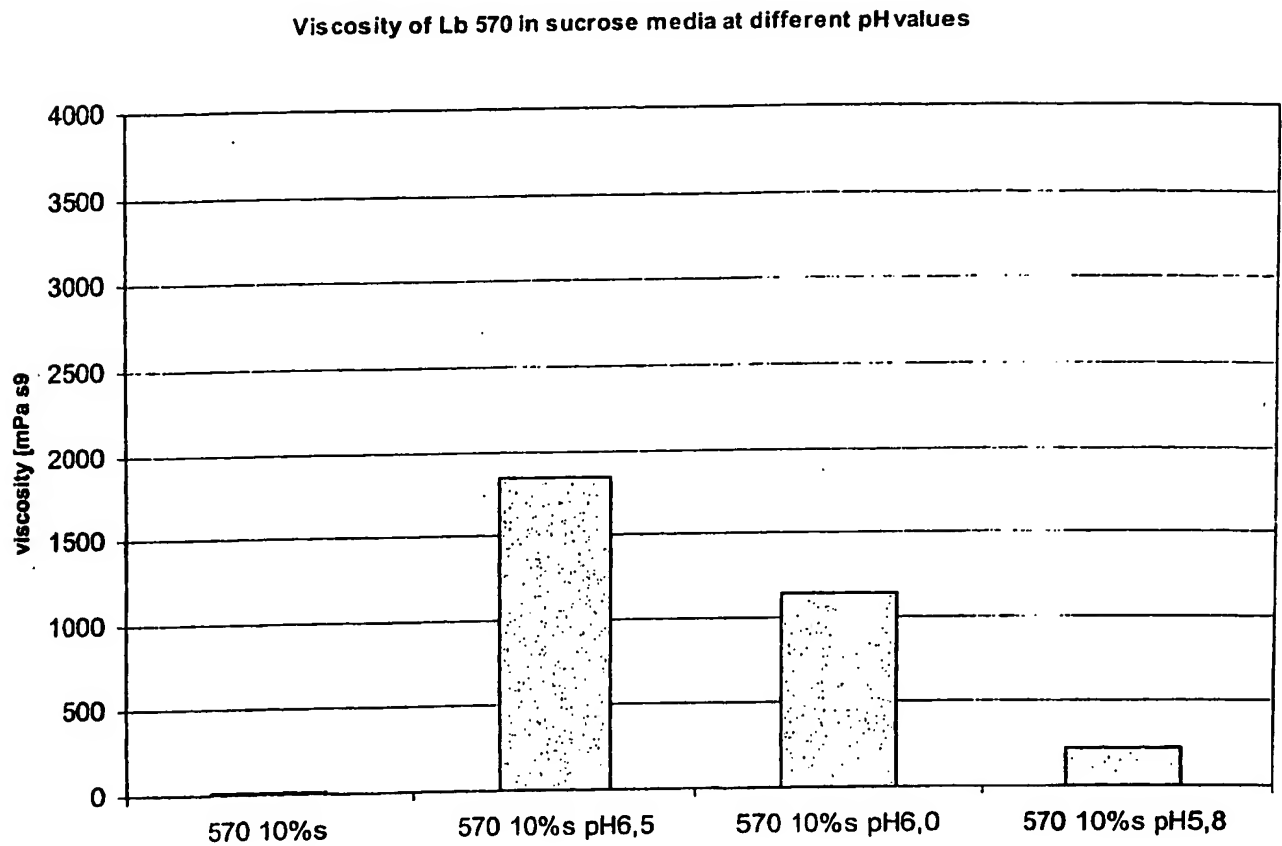


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**Figure 16. Viscosity of *Lactobacillus sakei* 570 in sucrose supplemented growth medium at different pH conditions.**

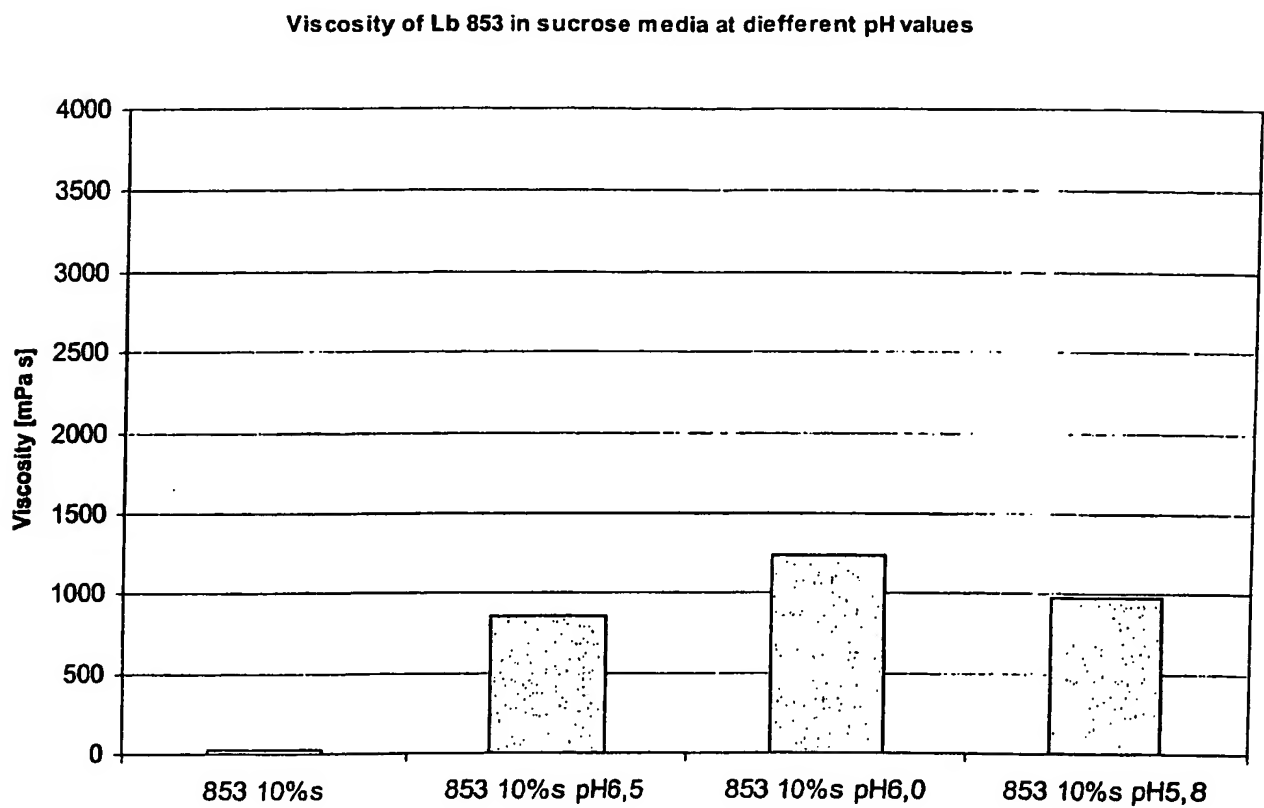
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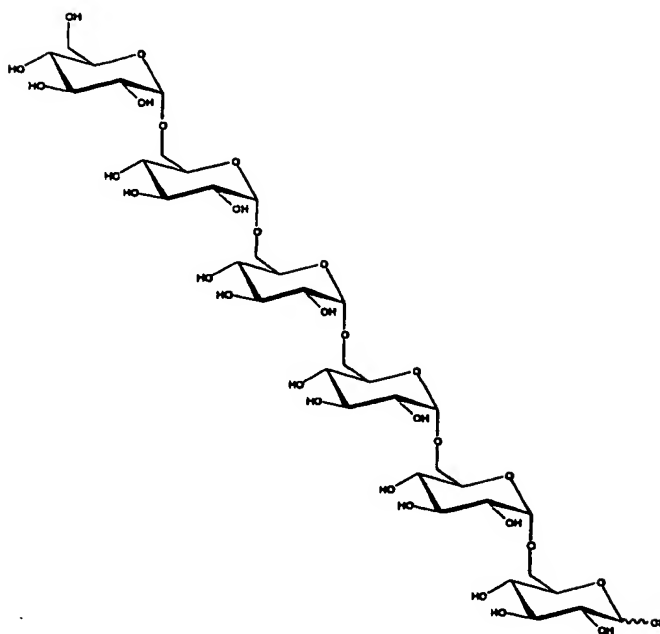
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Figure 17. Viscosity of *Lactobacillus plantarum* 853 in sucrose  
5 supplemented growth medium at different pH conditions.



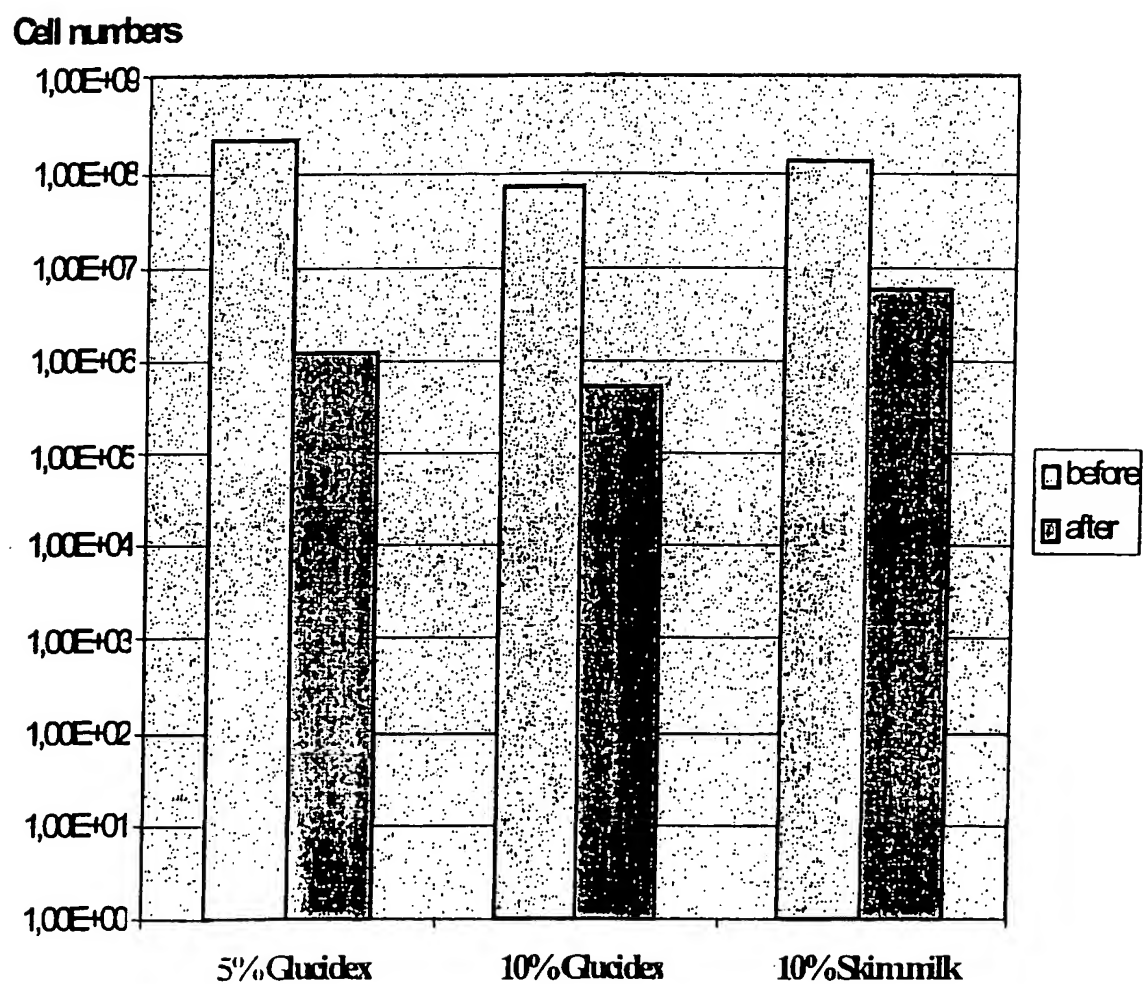
5 **Figure 18. NMR structural analysis of the EPS**



$\alpha$ -D-Glcp-(1→6)- $\alpha$ -D-Glcp-(1→6)- $\alpha$ -D-Glcp-(1→6)- $\alpha$ -D-Glcp-(1→6)- $\alpha$ -D-Glcp-(1→6)- $\alpha/\beta$ -D-Glcp

Figure 19. Spray drying of *Leuconostoc mesenteroides* 808 containing EPS ingredient.

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